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| U S DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTORNEY'S DOCKET NUMBER |
| FORM PTO-1390 (REV 10-94) | | 13470.1614USWO |
| TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371 | | U S APPLICATION NO (if known, see 37 CFR 1.5) unknown 10/048043 |
| INTERNATIONAL APPLICATION NO. PCT/EP00/06839 | INTERNATIONAL FILING DATE 18 July 2000 | PRIORITY DATE CLAIMED 27 July 1999 |
| TITLE OF INVENTION PORTIONED CLEANING SHAPED BODIES | | |
| APPLICANT(S) FOR DO/EO/US FAUBEL et al. | | |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: | | |
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(l). 4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date. 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ul style="list-style-type: none"> a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). b. <input checked="" type="checkbox"/> has been transmitted by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US) 6. <input checked="" type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ul style="list-style-type: none"> a. <input checked="" type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> have been transmitted by the International Bureau. c. <input checked="" type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An unsigned oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). | | |
| Items 11. to 16. below concern document(s) or information included: | | |
| <ol style="list-style-type: none"> 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A FIRST preliminary amendment. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 14. <input type="checkbox"/> A substitute specification. 15. <input type="checkbox"/> A change of power of attorney and/or address letter. 16. <input checked="" type="checkbox"/> Other items or information: International Publication Page, Amended Sheets 8-10 with amended claims 1-13, Marked-up Copy, Abstract, Form 1449, 3 references, Form PCT/ISA/210, Form PCT/IB/308 | | |

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|---|--|--|-------------------|
| U.S. APPLICATION NO (If known, see 37 CFR 1.5) unknown | INTERNATIONAL APPLICATION NO PCT/EP00/06839 | ATTORNEY'S DOCKET NUMBER 13470.1614USWO | |
| 17. [X] The following fees are submitted: | | CALCULATIONS PTO USE ONLY | |
| BASIC NATIONAL FEE (37 CFR 1.492(a) (1)-(5)): Search Report has been prepared by the EPO or JPO.....\$890.00 International preliminary examination fee paid to USPTO (37 CFR 1.492(a)(1)).....\$710.00 No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)).....\$740.00 Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(3)) paid to USPTO \$1040.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4).....\$100.00 | | | |
| ENTER APPROPRIATE BASIC FEE AMOUNT = | | \$860.00 | |
| Surcharge of \$130.00 for furnishing the oath or declaration later than [] 20 [] 30 months from the earliest claimed priority date (37 CFR 1.492(e)). | | \$ | |
| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE |
| Total claims | 13 | -20 = 0 | X \$18.00 \$0.00 |
| Independent claims | 4 | -3 = 1 | X \$84.00 \$84.00 |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) | | + \$260.00 | \$ |
| TOTAL OF ABOVE CALCULATIONS = | | \$944.00 | |
| Reduction by 1/2 for filing by small entity, if applicable. Small entity status is claimed pursuant to 37 CFR 1.27 | | \$ | |
| SUBTOTAL = | | \$944.00 | |
| Processing fee of \$130.00 for furnishing the English translation later than [] 20 [] 30 months from the earliest claimed priority date (37 CFR 1.492(f)). | | + \$ | |
| TOTAL NATIONAL FEE = | | \$944.00 | |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property | | + \$ | |
| TOTAL FEES ENCLOSED = | | \$944.00 | |
| | | Amount to be: refunded | \$ |
| | | charged | \$ |
| a. [X] Check(s) in the amount of <u>\$944.00</u> to cover the above fees is enclosed. b. [] Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. [X] The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>13-2725</u> . | | | |
| NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status. | | | |
| SEND ALL CORRESPONDENCE TO Dennis R. Daley MERCHANT & GOULD P.O. Box 2903 Minneapolis, MN 55402-0903 | | SIGNATURE:  NAME: Dennis R. Daley REGISTRATION NUMBER: 34,994 | |

S/N unknown

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

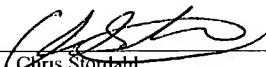
Applicant: FAUBEL et al. Examiner: unknown
Serial No.: unknown Group Art Unit: unknown
Filed: 22 January 2002 Docket No.: 13470.1614USWO
Title: PORTIONED CLEANING SHAPED BODIES

CERTIFICATE UNDER 37 CFR 1.10

'Express Mail' mailing label number: EV036335920US

Date of Deposit: 24 January 2002

I hereby certify that this paper or fee is being deposited with the United States Postal Service 'Express Mail Post Office To Addressee' service under 37 CFR 1.10 on the date indicated above and is addressed to Box PCT, Commissioner of Patents and Trademarks, Washington, D.C. 20231.

By: 
Chris Stordahl

PRELIMINARY AMENDMENT

Box PCT
Assistant Commissioner for Patents
Washington, D. C. 20231

Dear Sir:

In connection with the above-identified application filed herewith, please enter the following preliminary amendment, which is based on claims amended in prosecution of the international application and published in the International Preliminary Examination Report, a copy of which will follow.

Please find enclosed Amended Sheets 8, 9, and 10, with amended patent claims 1-13, which were amended according to Article 34, Rule 66, during the preliminary examination procedure on 19 July 2001.

IN THE ABSTRACT

Insert the attached Abstract page into the application as the last page thereof.

IN THE SPECIFICATION

A courtesy copy of the present specification is enclosed herewith. However, the World Intellectual Property Office (WIPO) copy should be relied upon if it is already in the U.S. Patent Office.

IN THE CLAIMS

Please amend claims 3, 4, 6, 11, 12, and 13 as follows:

3. (Amended) A process as claimed in claim 1, characterized in that the solid cleaner preferably contains one or more of the ingredients typical of surface cleaners selected from the group consisting of nonionic, anionic, cationic or amphoteric surfactants, carbonates, sulfates or phosphates and components with complexing properties, acids and perfume and dyes.
4. (Amended) A process as claimed in claim 1, characterized in that the water-soluble shell contains one or more components selected from the group of polymers.
6. (Amended) A process as claimed in claim 1, characterized in that the shaped cleaning body is contacted with water in a ratio by volume of preferably 1:10 to 1:300 and gives a liquid cleaning concentrate which, on further dilution with water by a factor of 10 to 300, forms a ready-to-use solution for the cleaning of surfaces.
11. (Amended) A system as claimed in claim 9, characterized in that a cleaning concentrate is obtained when the shaped cleaning body is contacted with water in a ratio by volume of 1:10 to 1:300 in the bottle with the particular holding capacity and, on further dilution with water by a factor of 10 to 300, the concentrate forms a ready-to-use solution for the cleaning of surfaces.
12. (Amended) The use of the system claimed in one claim 9 in the cleaning of buildings by cleaning contractors and generally in the institutional cleaning service industry.

13. (Amended) The use of the system claimed in claim 9 in the domestic sector.

REMARKS

The above preliminary amendment is made to remove multiple dependencies from claims 3, 4, 6, 11, 12, and 13.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Marked-up Copy".

A new abstract page is supplied to conform to that appearing on the publication page of the WIPO application, but the new Abstract is typed on a separate page as required by U.S. practice.

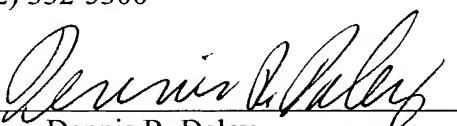
Applicants respectfully request that the preliminary amendment described herein be entered into the record prior to calculation of the filing fee and prior to examination and consideration of the above-identified application.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Dennis R. Daley (Reg. No. 34,944), at (612) 336.4689.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

Dated: 24 January 2002

By 
Dennis R. Daley
Reg. No. 34,994

DRD:hjh

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3. A process as claimed in claim 1 [or 2], characterized in that the solid cleaner preferably contains one or more of the ingredients typical of surface cleaners selected from the group consisting of nonionic, anionic, cationic or amphoteric surfactants, carbonates, sulfates or phosphates and components with complexing properties, acids and perfume and dyes.
4. A process as claimed in [one or more of] claim[s] 1 [to 3], characterized in that the water-soluble shell contains one or more components selected from the group of polymers.
6. A process as claimed in [one or more of] claim[s] 1 [to 5], characterized in that the shaped cleaning body is contacted with water in a ratio by volume of preferably 1:10 to 1:300 and gives a liquid cleaning concentrate which, on further dilution with water by a factor of 10 to 300, forms a ready-to-use solution for the cleaning of surfaces.
11. A system as claimed in claim 9 [or 10], characterized in that a cleaning concentrate is obtained when the shaped cleaning body is contacted with water in a ratio by volume of 1:10 to 1:300 in the bottle with the particular holding capacity and, on further dilution with water by a factor of 10 to 300, the concentrate forms a ready-to-use solution for the cleaning of surfaces.
12. The use of the system claimed in [one or more of] claim[s] 9 [to 11] in the cleaning of buildings by cleaning contractors and generally in the institutional cleaning service industry.
13. The use of the system claimed in [one or more of] claim[s] 9 [to 11] in the domestic sector.

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ABSTRACT

The invention relates to portioned cleaning shaped bodies which are comprised of solid cleaning agent and of a water-soluble coating and which are used for producing liquid cleaning agent concentrates. The invention also relates to the use of the cleaning shaped bodies in the area of building cleaning or industrial cleaning services or in the area of household cleaning.

Portioned Cleaning Shaped Bodies

This invention relates to portioned shaped cleaning bodies consisting of a solid powder-form cleaner and a water-soluble shell for the preparation of liquid cleaning concentrates and to their use in the cleaning of buildings or in the institutional cleaning service industry or in domestic cleaning.

In the cleaning service industry, it is common practice for superconcentrates to be purchased from the manufacturer of cleaning products and for cleaning concentrates to be prepared as required by dilution with water using equipment or containers of the cleaning contractor.

10 In order to provide the cleaning staff with sufficient quantities, the cleaning concentrate is generally prepared in large amounts of 100 liters or more. The contractor's cleaning staff place the required amount of concentrate in relatively small containers, such as bottles or canisters for example, for use in cleaning operations.

15 The disadvantage of this practice is that the contractor's staff have to transport the particular amounts of cleaning concentrate required from the stockroom or point of preparation to the point of use. This is all the more labor-intensive when cleaning concentrates have to be prepared for several applications such as, for example, window cleaning, floor cleaning

20 and other surface cleaning applications. So far as transportation is concerned, the particular cleaning contractor simply has to accept the weight of the liquid cleaning concentrates and has to have the necessary space available. Another consequence of this practice is that the contractor's staff have little flexibility. Either they have to take large

25 quantities with them - sufficient even for unforeseeable cleaning work - or they have to fetch supplies from the stockroom or point of preparation. Disadvantages, such as the weight of and space occupied by liquid

cleaning concentrates, also apply to the domestic sector.

The problem addressed by the present invention was to provide highly concentrated shaped cleaning bodies which would enable cleaning concentrates to be prepared in situ by dilution with water and which could
5 be used in the cleaning of buildings by cleaning contractors and generally in the institutional cleaning service industry or in the domestic sector.

Accordingly, the present invention relates to shaped cleaning bodies for the preparation of a liquid cleaning concentrate, characterized in that the shaped cleaning body consists of a solid cleaner, preferably in powder,
10 granular or paste form, and a water-soluble shell surrounding the solid cleaner and preferably has an elongate narrow form.

The shaped cleaning body preferably has a width of 1 to 3 cm at its widest point where it is cylindrical, elliptical or rectangular in shape. In another preferred embodiment, the length of the shaped cleaning body is at
15 least twice its width at its widest point where it is cylindrical, elliptical or rectangular in shape. The solid cleaner preferably contains one or more of the ingredients typical of surface cleaners selected from the group consisting of nonionic, anionic, cationic or amphoteric surfactants, carbonates, sulfates or phosphates or components with complexing
20 properties, acids and perfume and dyes. The water-soluble shell preferably contains one or more components selected from the group of polymers. In a particularly preferred embodiment, polyvinyl alcohol at least is present as the polymer. In a most particularly preferred embodiment, the shell consists entirely of polyvinyl alcohol.

25 Corresponding shaped cleaning bodies are used in the domestic sector and preferably in the cleaning of buildings by cleaning contractors and generally in the institutional cleaning service industry.

The present invention also relates to a process for the preparation of a cleaning concentrate in which

- a) a shaped cleaning body according to the invention is placed in the form of a portion, i.e. without previous quantity measurement, in a container with a particular holding capacity and
- 5 b) the container is filled with water to form a cleaning concentrate containing a particular quantity of active ingredients or
- c) a shaped cleaning body according to the invention is placed in the form of a portion, i.e. without previous quantity measurement, in a container with a particular holding capacity already filled with water to form a cleaning concentrate containing a particular quantity of
- 10 active ingredients.

The containers with a particular holding capacity preferably consist of plastic, glass or metals and preferably have a holding capacity of 0.3 to 10 liters and preferably 0.5 to 2.5 liters. For example, bottles in the form of

15 typical standard bottles as known, for example, in the beverage industry may be used.

The shaped cleaning body is contacted with water in a ratio by volume of preferably 1:10 to 1:300 and gives a liquid cleaning concentrate which, on further dilution with water by a factor of 10 to 300, forms a ready-
20 to-use solution for the cleaning of surfaces, but which may also be used without dilution.

The present invention also relates to a system - consisting of shaped cleaning bodies according to the invention combined with containers having a particular holding capacity that are preferably made of plastic, glass or metals and preferably have a holding capacity of 0.3 to 10 liters, the dimensions of the shaped cleaning body and the size of the container opening being co-ordinated with one another - which is suitable for providing a cleaning concentrate by contacting the shaped cleaning body in the container with the particular holding capacity with water in a ratio by
25 volume of 1:10 to 1:300, the cleaning concentrate forming a ready-to-use
30

solution for cleaning surfaces by further dilution with water by a factor of 10 to 300 or being directly used without any further dilution. Corresponding systems are intended for the cleaning sector, for example for domestic cleaning and preferably for the cleaning of buildings by cleaning contractors and generally for the institutional cleaning service industry.

The present invention affords several advantages. The particular quantities of cleaning concentrate required no longer have to be transported from the stockroom or point of preparation to the point of use, instead the cleaning concentrate can be prepared in situ simply by dissolving a single shaped cleaning body in water. Where cleaning concentrates are required for several applications such as, for example, window cleaning, floor cleaning, sanitary cleaning and other surface cleaning applications, it is convenient for the cleaning contractor to keep a supply of several different shaped cleaning bodies and flexibly to prepare the particular cleaning concentrate required in situ as and when required. When it comes to transportation, the contractor no longer has to put up with the weight of the liquid cleaning concentrates or to have the necessary space available for them because the shaped cleaning bodies take up far less space and are considerably lighter in weight. The advantages arising out of the lighter weight and compactness of the tablets also apply in the domestic sector.

Examples

As described above, solid cleaning formulations may be present in shells designed in accordance with the invention. For example, the following exemplary formulations were accommodated in cylindrical water-soluble shells with a length of 150 mm and a diameter of 30 mm. The same exemplary formulations were accommodated in a water-soluble shell of elliptical cross-section, the major diameter of the ellipse being 25 mm

and the minor diameter 12 mm for a length of 80 mm.

Example 1: powder, alkaline

| | | |
|----|--|---------|
| | Sodium carbonate | 45.0% |
| 5 | Potassium carbonate | 15.0% |
| | Sodium tripolyphosphate | 16.0% |
| | FA + EO (5-25) | 4.5% |
| | ABS Na | 6.0% |
| | Nitrolotriacetic acid (Na salt) | 3.2% |
| 10 | Rest = additives (dye, perfume, dust binder, etc.) | to 100% |

Example 2: powder, acidic

| | | |
|----|---------------------------------------|---------|
| | Sodium carbonate | 2.0% |
| | Amidosulfonic acid | 30.0% |
| 15 | Citric acid | 15.0% |
| | Na gluconate | 10.0% |
| | Alkane sulfonate | 5.0% |
| | FA + EO (5-25) | 8.0% |
| | Sodium sulfate | 28.5% |
| 20 | Rest = additives (dye, perfume, etc.) | to 100% |

Example 3: granules

| | | |
|----|--------------------------|-------|
| | Sodium tripolyphosphate | 14.0% |
| | Sodium metasilicate | 5.2% |
| 25 | Sodium hydroxide | 1.5% |
| | Sodium carbonate | 3.5% |
| | ABS acid | 2.7% |
| | Tallow alcohol + 14 EO | 1.1% |
| | Na carbonate decahydrate | 31.5% |
| 30 | Na sulfate | 29.2% |

Rest = additives (dye, perfume, etc.) to 100%

Example 4: paste

| | |
|---|---------|
| Sodium sulfate | 6.7% |
| 5 Na tripolyphosphate | 38.5% |
| Nonionic surfactants: fatty alcohol + EO (5-12) | 11.6% |
| Fatty alcohol + EO (13-25) | 1.2% |
| Alkyl polyglucoside | 6.8% |
| Alkane sulfonate Na | 23.0% |
| 10 Nitrilotriacetic acid (Na salt) | 2.8% |
| Rest = water, additives (dye, perfume, etc.) | to 100% |

These cleaners accommodated in elongate, water-soluble shells are placed in containers and then diluted with water for the preparation of the 15 cleaning concentrate.

Example 5

A shaped cleaning body according to the invention weighing 15 g is placed in a 1 liter bottle. After the bottled has been filled with ca. 1 liter of 20 water, it is shaken to form the liquid cleaning concentrate.

The advantages for the manufacturer, supplier, retailer (such as supermarkets) and the consumer are the sum total of all the advantages which concentrated products have over non-concentrated products: weight and volume are important factors in terms of general handling and 25 production, transportation, storage, etc. Example 5 according to the invention is around 66 times lighter in weight than the conventional liquid cleaning concentrate, not including the weight of the bottle, and around 66 times smaller in volume.

Accordingly, a factory which, in the past, had produced and 30 marketed 66 tonnes of conventional liquid cleaning concentrate would now

only have to produce and market 1 tonne. The advantages in regard to transportation, storage and further handling as far as the user are commensurate.

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ART 34 AMNT

Amended Claims

1. A process for the preparation of a cleaning concentrate in which
 - a) a shaped cleaning body consisting of a solid cleaner and a water-soluble shell surrounding the solid cleaner has a narrow elongate form, the width of the shaped cleaning body at its widest point where it is cylindrical, elliptical or rectangular in shape being 1 to 3 cm and the length of the shaped cleaning body being at least twice its width at its widest point where it is cylindrical, elliptical or rectangular in shape, and is placed in the form of a portion, i.e. without previous quantity measurement, in a bottle with a typical bottle shape and a holding capacity of 0.3 to 10 liters and
 - b) the bottle is filled with water to form a cleaning concentrate containing a particular quantity of active ingredients or
 - c) the said shaped cleaning body is placed in the form of a portion, i.e. without previous quantity measurement, in the said bottle already filled with water to form a cleaning concentrate containing a particular quantity of active ingredients.
2. A process as claimed in claim 1, characterized in that the said bottle is made of plastic, glass or metal.
3. A process as claimed in claim 1 or 2, characterized in that the solid cleaner preferably contains one or more of the ingredients typical of surface cleaners selected from the group consisting of nonionic, anionic, cationic or amphoteric surfactants, carbonates, sulfates or phosphates and components with complexing properties, acids and perfume and dyes.
4. A process as claimed in one or more of claims 1 to 3, characterized in that the water-soluble shell contains one or more components selected from the group of polymers.
5. A process as claimed in claim 4, characterized in that the water-

soluble shell contains polyvinyl alcohol.

6. A process as claimed in one or more of claims 1 to 5, characterized in that the shaped cleaning body is contacted with water in a ratio by volume of preferably 1:10 to 1:300 and gives a liquid cleaning concentrate

5 which, on further dilution with water by a factor of 10 to 300, forms a ready-to-use solution for the cleaning of surfaces.

7. The use of shaped cleaning bodies consisting of a solid cleaner and a water-soluble shell surrounding the solid cleaner and having a narrow elongate form, the width of the shaped cleaning body at its widest point

10 where it is cylindrical, elliptical or rectangular in shape being 1 to 3 cm and the length of the shaped cleaning body being at least twice its width at its widest point where it is cylindrical, elliptical or rectangular in shape in the cleaning of buildings by cleaning contractors and generally in the institutional cleaning service industry.

15 8. The use of shaped cleaning bodies consisting of a solid cleaner and a water-soluble shell surrounding the solid cleaner and having a narrow elongate form, the width of the shaped cleaning body at its widest point where it is cylindrical, elliptical or rectangular in shape being 1 to 3 cm and the length of the shaped cleaning body being at least twice its width at its

20 widest point where it is cylindrical, elliptical or rectangular in shape in the domestic sector.

9. A system consisting of shaped cleaning bodies consisting of a solid cleaner and a water-soluble shell surrounding the solid cleaner and having a narrow elongate form, the width of the shaped cleaning body at its widest point where it is cylindrical, elliptical or rectangular in shape being 1 to 3 cm and the length of the shaped cleaning body being at least twice its width at its widest point where it is cylindrical, elliptical or rectangular in shape and bottles with a typical bottle shape and a holding capacity of 0.3 to 10 liters, the dimensions of the shaped cleaning body and the size of the container

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30 opening being co-ordinated with one another.

10. A system as claimed in claim 9, characterized in that the bottle is made of plastic, glass or metal.
11. A system as claimed in claim 9 or 10, characterized in that a cleaning concentrate is obtained when the shaped cleaning body is 5 contacted with water in a ratio by volume of 1:10 to 1:300 in the bottle with the particular holding capacity and, on further dilution with water by a factor of 10 to 300, the concentrate forms a ready-to-use solution for the cleaning of surfaces.
12. The use of the system claimed in one or more of claims 9 to 11 in 10 the cleaning of buildings by cleaning contractors and generally in the institutional cleaning service industry.
13. The use of the system claimed in one or more of claims 9 to 11 in the domestic sector.

(12) NACH DEM VERTRAG ÜBER DIE INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES PATENTWESENS (PCT) VERÖFFENTLICHTE INTERNATIONALE ANMELDUNG

(19) Weltorganisation für geistiges Eigentum
Internationales Büro



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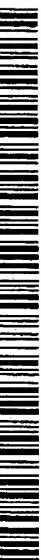
- Mit internationalem Recherchenbericht.
- Vor Ablauf der für Änderungen der Ansprüche geltenden Frist: Veröffentlichung wird wiederholt, falls Änderungen eintreffen

Zur Erklärung der Zweiibuchstaben-Codes, und der anderen Abkürzungen wird auf die Erklärungen ("Guidance Notes on Codes and Abbreviations") am Anfang jeder regulären Ausgabe der PCT-Gazette verwiesen.

(71) Anmelder (für alle Bestimmungsstaaten mit Ausnahme von US): HENKEL ECOLAB GMBH & CO. OHG [DE/DE]; Reisholzer Werftstrasse 38-42, D-40589 Düsseldorf (DE).

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A1

(54) Title: PORTIONED CLEANING SHAPED BODIES

WO 01/07558

(54) Bezeichnung: PORTIONIERTE REINIGUNGSFORMKÖRPER

(57) Abstract: The invention relates to portioned cleaning shaped bodies which are comprised of solid cleaning agents and of a water-soluble coating and which are used for producing liquid cleaning agent concentrates. The invention also relates to the use of the cleaning shaped bodies in the area of building cleaning or industrial cleaning services or in the area of household cleaning.

(57) Zusammenfassung: Die vorliegende Erfindung betrifft portionierte Reinigungsformkörper, die aus festen Reinigungsmitteln und wasserlöslicher Umhüllung bestehen, für die Herstellung von flüssigen Reinigungsmittelkonzentraten und ihre Verwendung im Sektor der Gebäudereinigung oder gewerblichen Reinigungsdienstleistung oder im Bereich der Haushaltsreinigung.

MERCHANT & GOULD P.C.

United States Patent Application

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: PORTIONED CLEANING SHAPED BODIES

The specification of which

- a. is attached hereto
- b. was filed on 24 January 2002, as application serial no. 10/048,043 and was amended on (if applicable) (in the case of a PCT-filed application) described and claimed in international no. PCT/EP00/06839 filed 18 July 2000, and as amended on 19 July 2001 (if any), which I have reviewed and for which I solicit a United States patent.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

- a. no such applications have been filed.
- b. such applications have been filed as follows:

| FOREIGN APPLICATION(S), IF ANY, CLAIMING PRIORITY UNDER 35 USC § 119 | | | |
|--|--------------------|--------------------------------------|-------------------------------------|
| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | DATE OF ISSUE (day, month, year) |
| Germany | 199 35 257.7 | 27 July 1999 | |
| ALL FOREIGN APPLICATION(S), IF ANY, FILED BEFORE THE PRIORITY APPLICATION(S) | | | |
| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | DATE OF ISSUE (day, month, year) |
| | | | |

I hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

| U.S. APPLICATION NUMBER | DATE OF FILING (day, month, year) | STATUS (patented, pending, abandoned) |
|-------------------------|-----------------------------------|---------------------------------------|
| | | |

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

| U.S. PROVISIONAL APPLICATION NUMBER | DATE OF FILING (Day, Month, Year) |
|-------------------------------------|-----------------------------------|
| | |

I acknowledge the duty to disclose information that is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (reprinted below):

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
 - (1) Each inventor named in the application;
 - (2) Each attorney or agent who prepares or prosecutes the application; and
 - (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.
- (e) In any continuation-in-part application, the duty under this section includes the duty to disclose to the Office all information known to the person to be material to patentability, as defined in paragraph (b) of this section, which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

| | | | |
|-----------------------------|--------------------------|---------------------------|--------------------------|
| Albrecht, John W. | Reg. No. <u>40,481</u> | Leonard, Christopher J. | Reg. No. <u>41,940</u> |
| Ali, M. Jeffer | Reg. No. <u>46,359</u> | Liepa, Mara E. | Reg. No. <u>40,066</u> |
| Altera, Allan G. | Reg. No. <u>40,274</u> | Lindquist, Timothy A. | Reg. No. <u>40,701</u> |
| Anderson, Gregg I. | Reg. No. <u>28,828</u> | Lown, Jean A. | Reg. No. <u>48,428</u> |
| Batzli, Brian H. | Reg. No. <u>32,960</u> | Mayfield, Denise L. | Reg. No. <u>33,732</u> |
| Beard, John L. | Reg. No. <u>27,612</u> | McDonald, Daniel W. | Reg. No. <u>32,044</u> |
| Berns, John M. | Reg. No. <u>43,496</u> | McIntyre, Jr., William F. | Reg. No. <u>44,921</u> |
| Branch, John W. | Reg. No. <u>41,633</u> | Mitchem, M. Todd | Reg. No. <u>40,731</u> |
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| Bruess, Steven C. | Reg. No. <u>34,130</u> | Nelson, Anna M. | Reg. No. <u>48,935</u> |
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| Daignault, Ronald A. | Reg. No. <u>25,968</u> | Pytel, Melissa J. | Reg. No. <u>41,512</u> |
| Daley, Dennis R. | Reg. No. <u>34,994</u> | Qualey, Terry | Reg. No. <u>25,148</u> |
| Daulton, Julie R. | Reg. No. <u>36,414</u> | Reich, John C. | Reg. No. <u>37,703</u> |
| DeVries Smith, Katherine M. | Reg. No. <u>42,157</u> | Reiland, Earl D. | Reg. No. <u>25,767</u> |
| DiPietro, Mark J. | Reg. No. <u>28,707</u> | Samuels, Lisa A. | Reg. No. <u>43,080</u> |
| Doscotch, Matthew A. | Reg. No. <u>P-48,957</u> | Schmaltz, David G. | Reg. No. <u>39,828</u> |
| Edell, Robert T. | Reg. No. <u>20,187</u> | Schuman, Mark D. | Reg. No. <u>31,197</u> |
| Epp Ryan, Sandra | Reg. No. <u>39,667</u> | Schumann, Michael D. | Reg. No. <u>30,422</u> |
| Glance, Robert J. | Reg. No. <u>40,620</u> | Scull, Timothy B. | Reg. No. <u>42,137</u> |
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| Goggin, Matthew J. | Reg. No. <u>44,125</u> | Skoog, Mark T. | Reg. No. <u>40,178</u> |
| Golla, Charles E. | Reg. No. <u>26,896</u> | Spellman, Steven J. | Reg. No. <u>45,124</u> |
| Gorman, Alan G. | Reg. No. <u>38,472</u> | Stewart, Alan R. | Reg. No. <u>47,974</u> |
| Gould, John D. | Reg. No. <u>18,223</u> | Stoll-DeBell, Kirstin L. | Reg. No. <u>43,164</u> |
| Gregson, Richard | Reg. No. <u>41,804</u> | Sullivan, Timothy | Reg. No. <u>47,981</u> |
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| Hamer, Samuel A. | Reg. No. <u>46,754</u> | Swenson, Erik G. | Reg. No. <u>45,147</u> |
| Hamre, Curtis B. | Reg. No. <u>29,165</u> | Tellekson, David K. | Reg. No. <u>32,314</u> |
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| Holzer, Jr., Richard J. | Reg. No. <u>42,668</u> | Vandenburgh, J. Derek | Reg. No. <u>32,179</u> |
| Hope, Leonard J. | Reg. No. <u>44,774</u> | Wahl, John R. | Reg. No. <u>33,044</u> |
| Jardine, John S. | Reg. No. <u>P-48,835</u> | Weaver, Paul L. | Reg. No. <u>48,640</u> |
| Johns, Nicholas P. | Reg. No. <u>48,995</u> | Welter, Paul A. | Reg. No. <u>20,890</u> |
| Johnston, Scott W. | Reg. No. <u>39,721</u> | Whipps, Brian | Reg. No. <u>43,261</u> |
| Kadievitch, Natalie D. | Reg. No. <u>34,196</u> | Whitaker, John E. | Reg. No. <u>42,222</u> |
| Kaseburg, Frederick A. | Reg. No. <u>47,695</u> | Wier, David D. | Reg. No. <u>P-48,229</u> |
| Kettelberger, Denise | Reg. No. <u>33,924</u> | Williams, Douglas J. | Reg. No. <u>27,054</u> |
| Keys, Jeramie J. | Reg. No. <u>42,724</u> | Withers, James D. | Reg. No. <u>40,376</u> |
| Knearl, Homer L. | Reg. No. <u>21,197</u> | Witt, Jonelle | Reg. No. <u>41,980</u> |
| Kowalchyk, Alan W. | Reg. No. <u>31,535</u> | Wong, Thomas S. | Reg. No. <u>48,577</u> |
| Kowalchyk, Katherine M. | Reg. No. <u>36,848</u> | Wu, Tong | Reg. No. <u>43,361</u> |
| Lacy, Paul E. | Reg. No. <u>38,946</u> | Young, Thomas | Reg. No. <u>25,796</u> |
| Larson, James A. | Reg. No. <u>40,443</u> | Zeuli, Anthony R. | Reg. No. <u>45,255</u> |

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/ organization who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Merchant & Gould P.C. to the contrary.

I understand that the execution of this document, and the grant of a power of attorney, does not in itself establish an attorney-client relationship between the undersigned and the law firm Merchant & Gould P.C., or any of its attorneys.

Please direct all correspondence in this case to Merchant & Gould P.C. at the address indicated below:

Merchant & Gould P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903



I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| | | | | |
|---|---|------------------------|-------------------------------------|--|
| 2 | Full Name Of Inventor <i>Heiko Faubel</i> | Family Name FAUBEL | First Given Name Heiko | Second Given Name |
| 0 | Residence & Citizenship | City Wermelskirchen | State or Foreign Country Germany | Country of Citizenship Germany <i>DEX</i> |
| 1 | Mailing Address | Address Loh 32 | City Wermelskirchen | State & Zip Code/Country 42929 Germany |

Signature of Inventor 201: *Heiko Faubel* Date: February 5, 2002

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| 2 | Full Name Of Inventor <i>Francois Prebin</i> | Family Name PREBIN | First Given Name Francois | Second Given Name |
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Signature of Inventor 202: *Jurgen Rupietta* Date:

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| 2 | Full Name Of Inventor <i>Jurgen Rupietta</i> | Family Name RUPIETTA | First Given Name Gerd | Second Given Name |
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| 3 | Mailing Address | Address An der Kreuzkant 3 | City Grevenbroich | State & Zip Code/Country 41515 Germany |

Signature of Inventor 203: *Jurgen Rupietta* Date: February 5, 2002

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Signature of Inventor 204: *Karl-Heinz Rogmann* Date:

February 5, 2002

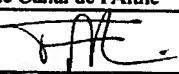
Please direct all correspondence in this case to Merchant & Gould P.C. at the address indicated below:

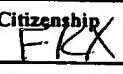
Merchant & Gould P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903



I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| | | | | |
|---|----------------------------|------------------------|-------------------------------------|---|
| 2 | Full Name Of Inventor | Family Name FAUBEL | First Given Name Heiko | Second Given Name |
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Signature of Inventor 201:  Date:

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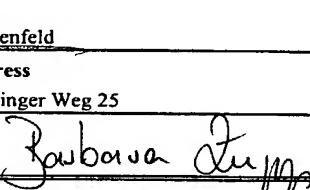
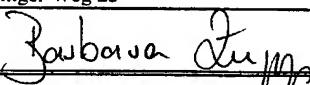
| | | | | |
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| 2 | Full Name Of Inventor | Family Name RUPIETTA | First Given Name Gerd | Second Given Name |
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Signature of Inventor 203:  Date:

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Signature of Inventor 204:  Date:

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| 2 | Full Name Of Inventor <u>6-00</u> | Family Name HILTNER | First Given Name Heiko | Second Given Name |
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| Signature of Inventor 205: <u>Heiko Hiltner</u> | | | Date: | 01.02.2002 |
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| Signature of Inventor 206: | | | Date: | |

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| Signature of Inventor 206:  | | | | Date: February 5, 2002 |